# APPENDIX C Average Engine Metal Removal

# Iron

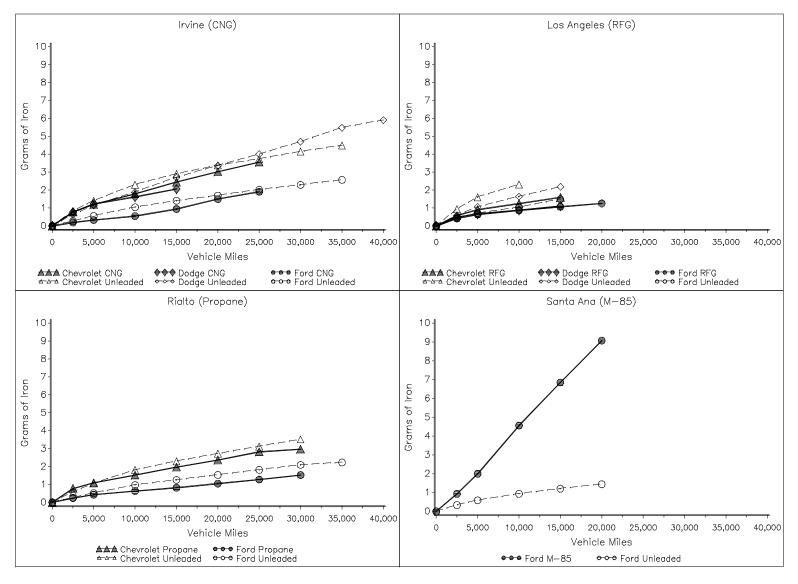


Figure C-1. Average Cumulative Weight of Iron Removed from Engines Versus Vehicle Miles

# Chromium

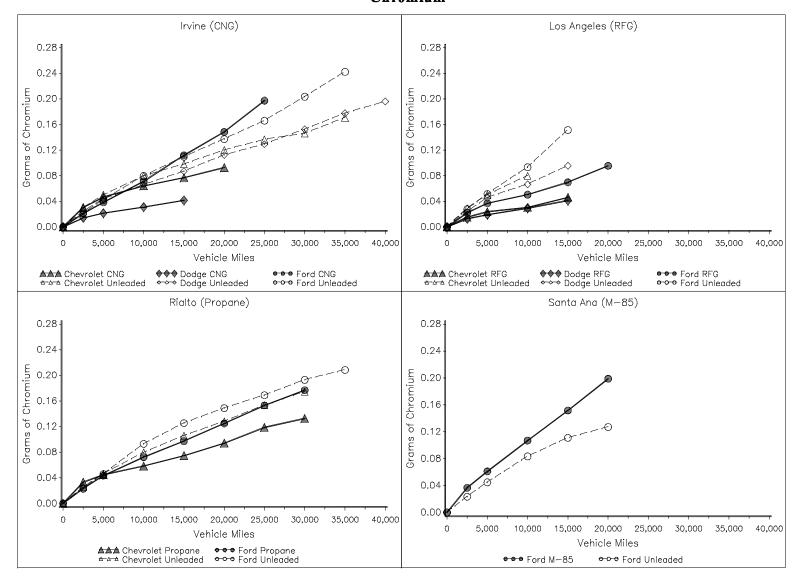


Figure C-2. Average Cumulative Weight of Chromium Removed from Engines Versus Vehicle Miles

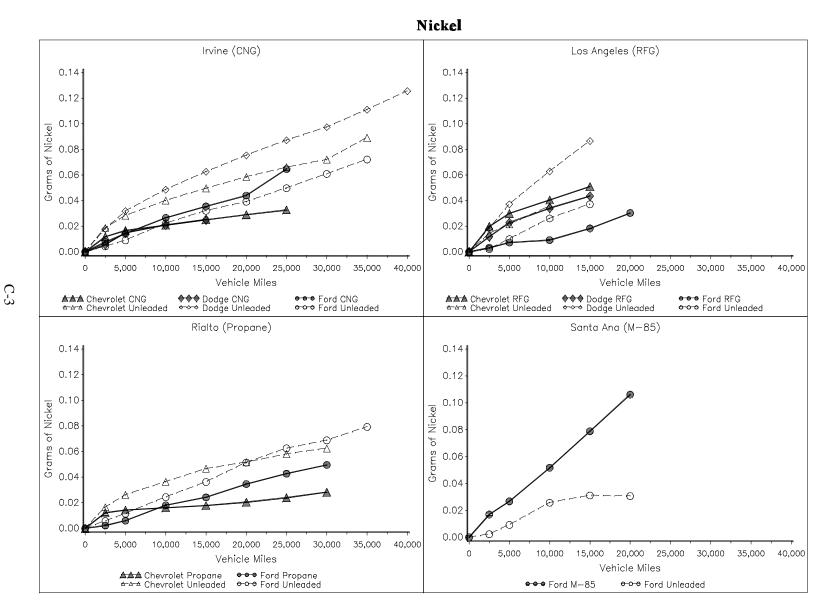


Figure C-3. Average Cumulative Weight of Nickel Removed from Engines Versus Vehicle Miles

## Aluminum

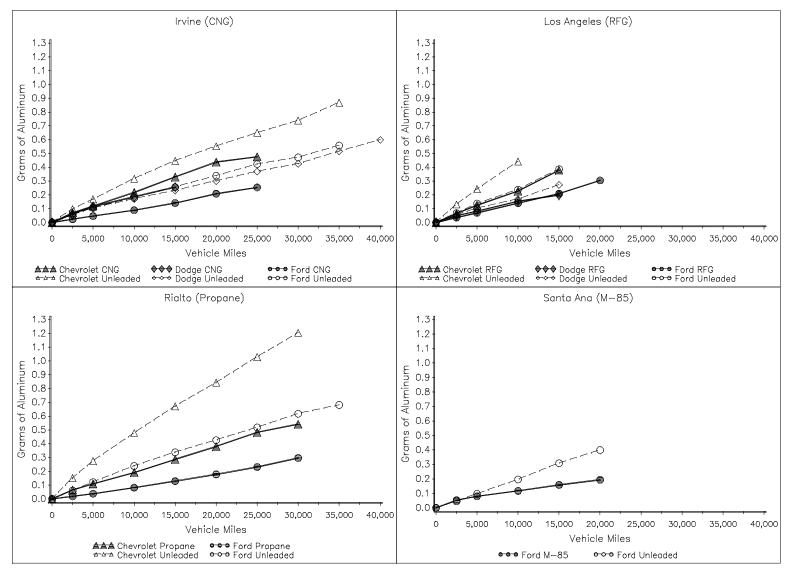


Figure C-4. Average Cumulative Weight of Aluminum Removed from Engines Versus Vehicle Miles

▲▲▲ Chevrolet Propane

<u>►</u> Chevrolet Unleaded

e e e Ford Propane e o e Ford Unleaded

### Lead Irvine (CNG) Los Angeles (RFG) 4.8 4.8 4,4 4.0 4.0 3.6 3.6 3.2 2.8 3.2 2.4 2.0 1.6 Grams of Lead 3.2 2.8 2.4 2.0 1.6 1.2 1.2 0,8 0.8 15,000 20,000 25,000 15,000 20,000 25,000 30,000 35,000 40,000 0 5,000 10,000 30,000 35,000 40,000 5,000 10,000 Vehicle Miles Vehicle Miles ♦♦♦ Dodge CNG ♦ Dodge Unleaded ♦♦♦ Dodge RFG ♦♦♦ Dodge Unleaded ▲▲▲ Chevrolet CNG ••• Ford CNG ••• Ford Unleaded ▲▲▲ Chevrolet RFG ♣──▲ Chevrolet Unleaded ••• Ford RFG ••• Ford Unleaded △ △ Chevrolet Unleaded Rialto (Propane) Santa Ana (M-85) 4.8 4.8 4.4 4,0 4.0 3.6 3.6 Orams of Lead 3.2.0 2.4 2.0 1.6 3.2 2.8 Grams of 2.4 2.0 1.6 1.2 1.2 0.8 0.8 0.4 5,000 10,000 15,000 20,000 25,000 30,000 35,000 40,000 5,000 10,000 15,000 20,000 25,000 30,000 35,000 40,000 Vehicle Miles

Figure C-5. Average Cumulative Weight of Lead Removed from Engines Versus Vehicle Miles

Vehicle Miles

••• Ford Unleaded

♥♥♥ Ford M-85

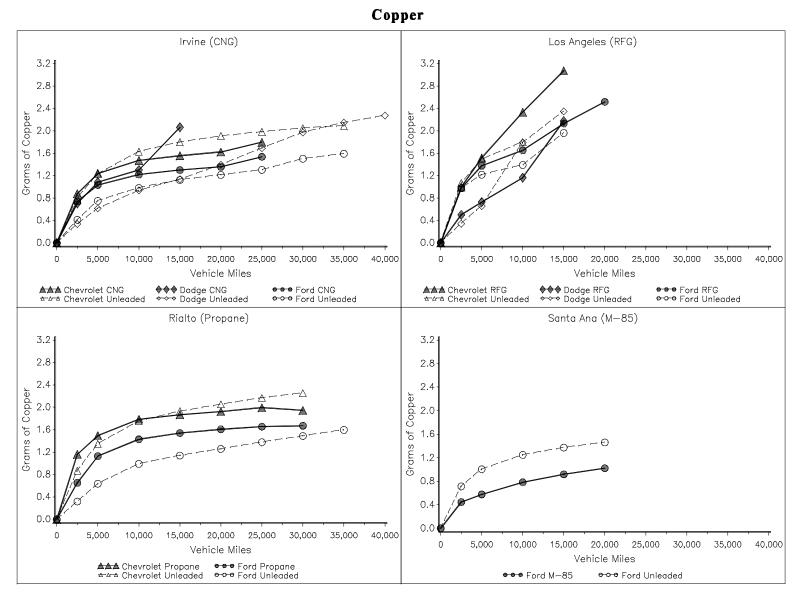


Figure C-6. Average Cumulative Weight of Copper Removed from Engines Versus Vehicle Miles

# Tin

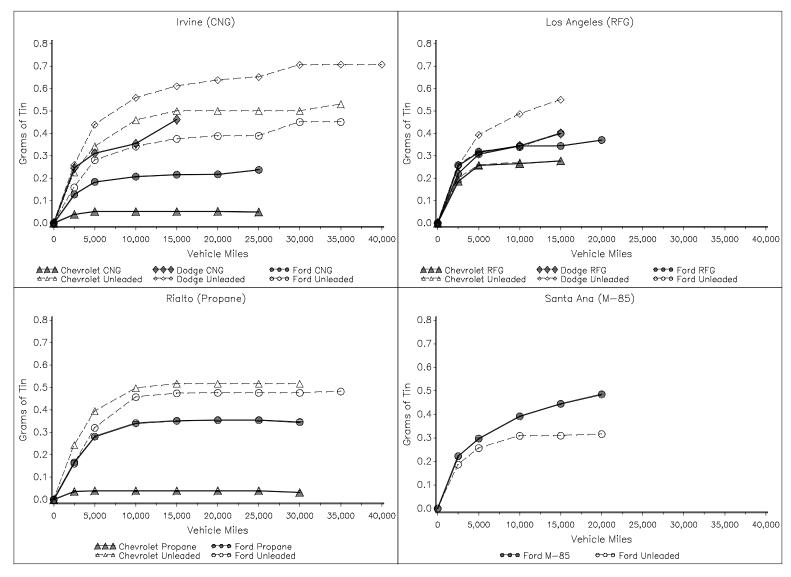


Figure C-7. Average Cumulative Weight of Tin Removed from Engines Versus Vehicle Miles

# Molybdenum

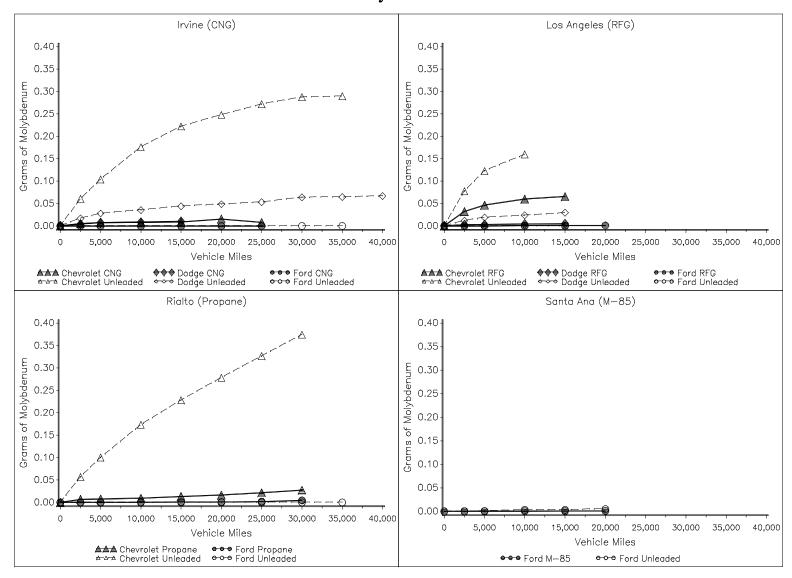


Figure C-7. Average Cumulative Weight of Molybdenum Removed from Engines Versus Vehicle Miles

### Antimony Irvine (CNG) Los Angeles (RFG) 0.35 0.35 0.30 0.30 Grams of Antimony Grams of Antimony 0.25 0.25 0.20 0.20 0.15 0.15 0.10 0.10 0.05 0.05 15,000 20,000 25,000 30,000 35,000 15,000 20,000 25,000 30,000 35,000 10,000 40,000 10,000 40,000 Vehicle Miles Vehicle Miles ▲▲▲ Chevrolet CNG ♦♦♦ Dodge CNG ♦♦♦ Dodge Unleaded Ford CNG Ford Unleaded ▲▲▲ Chevrolet RFG ★ △ Chevrolet Unleaded ♦♦♦ Dodge RFG ♦♦♦ Dodge Unleaded ••• Ford RFG ••• Ford Unleaded △△ Chevrolet Unleaded Santa Ana (M-85)Rialto (Propane) 0.35 0.35 0.30 0.30 Grams of Antimony 0.25 Grams of Antimony 0.25 0.20 0.20 0.15 0.15 0.10 0.10 0.05 0.05 0.00 5,000 10,000 20,000 30,000 35,000 40,000 5,000 10,000 15,000 20,000 25,000 30,000 35,000 40,000 Vehicle Miles Vehicle Miles AAA Chevrolet Propane △ △ △ Chevrolet Unleaded ◆ ○ ◆ Ford Propane ◆ ○ ◆ Ford Unleaded e-o-e Ford Unleaded • • • Ford M-85

Figure C-9. Average Cumulative Weight of Antimony Removed from Engines Versus Vehicle Miles